

What is Claimed:

- 1 1. A method of mounting a fiber optic unit to a photosensor, the
2 method comprising the steps to:

3 mounting the photosensor to a first carrier;

4 bonding a first end of the fiber optic unit to the photosensor to
5 create a joint between the fiber optic unit and the photosensor;

6 mounting a second end of the fiber optic unit to a second
7 carrier; and

8 compressing the joint between the fiber optic unit and the
9 photosensor to strengthen the bond between the fiber optic unit and the
10 photosensor.
- 1 2. The method of claim 1, further comprising the step of aligning
2 an optical axis of the fiber optic unit with an optical axis of the photosensor.
- 1 3. The method of claim 2, further comprising the step of applying
2 a pressure along the optical axis of the fiber optic unit.
- 1 4. The method of claim 2, further comprising the step of applying
2 a pressure along the optical axis of the photosensor.
- 1 5. The method of claim 1, further comprising the step of applying
2 the pressure to a side of the first carrier.

1 6. The method of claim 2, further comprising the step of applying
2 a flexible backing along the optical axis of the photosensor.

1 7. The method of claim 6, further comprising the step of applying
2 the pressure to the flexible backing.

1 8. The method of claim 6, further comprising the step of
2 compressing the flexible backing.

1 9. The method of claim 6, further comprising the step of applying
2 at least one compression force to the flexible backing.

1 10. A device for mounting a fiber optic unit to a photosensor, the
2 device comprising:

3 a photosensor mounted to a first carrier;

4 a fiber optic unit coupled to the photosensor to create a joint
5 between the photosensor and the fiber optic unit; and

6 a force applying means coupled to the photosensor and the
7 fiber optic unit for applying a compression force to the joint.

1 11. The device of claim 10, wherein the force applying means
2 includes a second carrier mounted to the fiber optic unit.

1 12. The device of claim 10, wherein the force applying means
2 includes a flexible backing coupled to the first carrier.

1 13. The device of claim 10, wherein the force applying means
2 includes a spring.

1 14. The device of claim 13, wherein the spring presses the flexible
2 backing against the first carrier.

1 15. The device of claim 12, wherein the flexible backing is formed
2 from a paste material.